

Claims

1. A device in a process engineering column for the guiding of liquid, said device including at least two parts made of sheet metal and releasably
5 connected to one another,
characterised in that a recess is arranged in one of said parts and an elevation fitting into said recess is arranged in the other of said parts; and in that said two sheet metal parts are held in a secured position by a hook connection between said recess and said elevation, with said recess and
10 said elevation forming at least a single pair, and said sheet metal parts having planar regions lying on top of one another in the neighborhood of said pair.
2. A device as set forth claim 1, characterised in that a second elevation in the
15 shape of a shallow hoop and lying within a planar neighboring region is arranged in said other sheet metal part and a tab of said one sheet metal part is pushed in between said hoop and said planar neighbouring region.
3. A device as set forth in claim 1, characterised in that said other sheet metal
20 part has a hook-like recess lying in a plane; in that a third sheet metal part has a slot-like aperture in a planar section; in that said plane of said hook-like recess is arranged transversely to the planar section of said slot-like aperture; in that said third sheet metal part is hung into said hook-like

recess of said second sheet metal part by the slot-like aperture; and in that said first sheet metal part has a slot into which said planar section of said third sheet metal part is pushed, with the pair consisting of said recess and of said associated elevation being in a hooked together state.

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4. A device as set forth in claim 1, characterised in that said one sheet metal part includes a large planar area which merges into at least one tab with a pair of said recesses and a bending edge extending from said tab into a strip-shaped area; in that said other sheet metal part has two hoops and two elevations associated with said recesses; and in that said one sheet metal part can be arranged in two orientations, with the strip-shaped area being directed away from said other sheet metal part in the one orientation and being directed towards said other sheet metal part in the other orientation.
- 10 5. A device as set forth in claim 1, characterised in that a second elevation in the form of a spring elastically deflectable tab and lying within a planar neighboring region is arranged in said other sheet metal part with a flat piece of said one sheet metal part being pushed in between said tab and a planar neighboring region.
- 15 6. A device as set forth in claim 5, characterised in that said one sheet metal part has a second recess opening towards a rim of said one sheet metal part
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in a strip-shaped region between said two recesses and into which said tab is pushed.

7. A fractionating column having packings and a device in accordance with any one of claims 1 to 6, characterised in that the device is arranged above and/or below a packing; and in that liquid can be distributed and/or collected by means of the device.
8. A fractionating column as set forth in claim 7 wherein said device is a liquid distributor including at least one main passage and a plurality of secondary passages and wherein each secondary passage constitutes said third sheet metal part; wherein said other sheet metal part is a carrier beam for connecting the secondary passages and said one sheet metal part secures the carrier beam to said secondary passages.
9. A fractionating column as set forth in claim 7 wherein said device is a liquid distributor including at least one main passage and a plurality of secondary passages and wherein each secondary passage constitutes said other sheet metal part; and wherein said one sheet metal part is a guide member for distributing liquid from said main passage into said secondary passage.
10. A tray column having a device in accordance with any one of claims 1 to 6, characterised in that the device is a downcomer.
11. In combination,

a first sheet metal part having at least one recess therein, and

a second sheet metal part disposed in overlying parallel relation to said first sheet metal part and having at least one elevation therein, said elevation being disposed in said recess of said first sheet metal part to releaseably secure said second sheet part relative to said first sheet part.

12. The combination as set forth in claim 11 wherein said second sheet metal part has a hoop therein receiving said first sheet metal part therein to retain said elevation of said second sheet metal part in said recess of said first sheet metal part.

10 13. In combination

a plurality of parallel spaced apart passages for receiving liquid therein, each said passage having a pair of upstanding walls, each said wall having a pair of apertures therein;

at least one carrier beam disposed transversely of and over said walls of said passages, said beam having a pair of parallel depending walls, one of said walls of said beam having an elevation therein and each of said walls of said beam having at least a pair of hook-like recesses receiving said upstanding walls of a respective passage therein and a pair of hooks disposed in said apertures of said received wall; and

20 at least one sheet metal plate slidably mounted on one of said walls of said carrier beam in parallel relation to said one wall, said plate having a pair of slots receiving said walls of said respective passage therein and a recess receiving said

elevation of said beam therein to releaseably secure said respective passage and said carrier beam together.

14. The combination as set forth in claim 13 further comprising a hoop disposed on said carrier beam and receiving a portion of said plate with said recess therein to maintain said portion of said plate in parallel with said wall of said carrier beam.

15. The combination as set forth in claim 13 wherein said plate has a pair of parallel portions, each said portion having a respective recess therein, and wherein said one wall of said beam has a pair of said elevations thereon for reception in each respective recess.

16. The combination as set forth in claim 13 further comprising a tab on said carrier beam for resiliently engaging said plate with said recess of said plate receiving said elevation of said carrier beam therein.